

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE May 31, 1973

|                                                  |                      |                               |                     |
|--------------------------------------------------|----------------------|-------------------------------|---------------------|
| Operator<br>El Paso Natural Gas Company          |                      | Lease<br>Riddle F No. 9       |                     |
| Location<br>850'N, 1100'W, Section 17, T28N, R8W |                      | County<br>San Juan            | State<br>New Mexico |
| Formation<br>Pictured Cliffs Ext.                |                      | Pool<br>Blanco                |                     |
| Casing: Diameter<br>2.875                        | Set At: Feet<br>2307 | Tubing: Diameter<br>No Tubing | Set At: Feet        |
| Pay Zone: From<br>2230                           | To<br>2290           | Total Depth:<br>2307          | Shut In<br>5-23-73  |
| Stimulation Method<br>SWF                        |                      | Flow Through Casing<br>XX     | Flow Through Tubing |

|                                       |                        |                                                     |                                            |                                        |  |
|---------------------------------------|------------------------|-----------------------------------------------------|--------------------------------------------|----------------------------------------|--|
| Choke Size, Inches<br>.750            |                        | Choke Constant: C<br>12.365                         |                                            | Tubingless Completion                  |  |
| Shut-In Pressure, Casing, PSIG<br>674 | + 12 = PSIA<br>686     | Days Shut-In<br>8                                   | Shut-In Pressure, Tubing PSIG<br>No Tubing | + 12 = PSIA                            |  |
| Flowing Pressure: P PSIG<br>86        | + 12 = PSIA<br>98      | Working Pressure: P <sub>w</sub> PSIG<br>Calculated | + 12 = PSIA<br>118                         |                                        |  |
| Temperature:<br>T = 63 °F             | F <sub>t</sub> = .9971 | n =<br>.85                                          | F <sub>p</sub> (From Tables)<br>1.010      | Gravity<br>.645 F <sub>g</sub> = .9645 |  |

$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_t \times F_g \times F_{pv}$$

$$Q = (12.365) (98) (.9971) (.9645) (1.010) = 1177 \text{ MCF/D}$$

$$\text{OPEN FLOW} = Aof = Q \left( \frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

NOTE: The well blew dry gas.

$$Aof = Q \left( \frac{470596}{456672} \right)^n = (1177) (1.031)^{.85} = (1177) (1.026)$$

$$Aof = 1208 \text{ MCF/D}$$

TESTED BY Roger Hardy

WITNESSED BY \_\_\_\_\_

*William D. Welch*  
William D. Welch, Well Test Engineer